AMENDMENTS TO THE CLAIMS

Kindly amend the claims as follows:

1 – 8 (canceled)

9. (currently amended) ~~A antenna assembly according to claim 8, wherein the ASIC comprising the algorithm of the following steps:~~

A phased array antenna assembly, adapted for reducing severe radiation hazards to the human body, useful for transmitting and receiving signals while taking into account the indoor electromagnetic field strength, said antenna design comprising:

a micro-strip small-size antenna;

a switching device, having a communicating means with said antenna to select between receiving or transmitting modes, further having a selecting means for phase shift and the receiving/transmitting frequencies;

a controller adapted to receive inputs from said switching device comprising:

coordinating means, adapted to interconnect said switching device with a algorithm-based software; and

memory queue that records the optimal path in each indoor environment to each of the associated nodes to said antenna assembly; and,

an ASIC protocol adapted to control said phased array antenna assembly, said ASIC protocol comprising the following steps:

scanning with the first beam for the first station;

receiving a signal and writing the RSSI;

proceeding to the next beam direction;

getting a maximum RSSI or received field strength from said station;

calculating the station's virtual distance from ~~the~~ said antenna and adjusting the power level to the correct one;

registering the obtained RSSI and/or level in a memory, wherein ~~the~~ said obtained RSSI and/or level is associated with the beam direction and with the station ID; and

scanning for a plurality of other stations as required;

wherein said assembly is cost effective in the manner it is adapted for a indoor mass-utilization consisting of low cost materials and components, and wherein said assembly radiate a limited electromagnetic field in a minimal measure required for communication, and further wherein said ASIC protocol controls the antenna operation in the manner that the antenna is adapted to fit with any RF protocol.

10. (currently amended) The antenna assembly according to claim 9, ~~additionally comprising the step of proceeding~~ adapted to proceed with other receiving and/or transmitting tasks.

11. (canceled)

12. (currently amended) The antenna assembly according to claim [[8]] 9, characterized by that antenna used is a cell-wall socket (CWS).

13 – 24 (canceled)

25. (currently amended) The antenna assembly as defined in claim 9, adapted for mirroring a plurality of main beam lobes, wherein the symmetry of the mirrored beams is referred to a predetermined axis of the plate that comprises the element array, and further wherein said antenna assembly is adapted for mirroring L beam lobes, L being any positive even integer ~~number~~, comprising:

a plurality of RF inputs/outputs;

a plurality of RF switches;

1:L splitter modules; and,

an array of *n* by *m* elements with any polarization desired by the user.

26. (original) The phased array antenna according to claim 25, additionally comprising at least one switching module.

27. (original) The phased array antenna according to claim 26, wherein at least a portion of said switching modules is in series.

28. (original) The phased array antenna according to claim 26, wherein at least a portion of said switching modules is in parallel.

29. (currently amended) The phased array antenna according to claim 26, wherein the switching module is an electronic circuit comprising *inter alia* a plurality of p RF signal inlets, a plurality of q RF signal outlets and a plurality of $p+q$ diodes, p and q being any positive integers, ~~numbers,~~ in such a manner that each of said $p+q$ diodes interconnects one of the q inlets with n outlets, n being any positive integer such that $1 \leq n \leq q$.

30. (previously presented) The phased array antenna according to claim 29, wherein $p = q = 2n$.

31. (currently amended) The phased array antenna according to claim 26, wherein the switching module is an electronic circuit comprising *inter alia* a plurality of p RF signal inlets, a plurality of q RF signal outlets and a plurality of $p+q-1$ diodes, q and p being any positive even integers ~~numbers~~, and further wherein each of said $p+q$ diodes interconnects one of the q inlets with n outlets, such that $1 \leq n \leq q$, and further wherein at least one beam is not mirrored.

32. (currently amended) The phased array antenna according to claim 26, wherein the switching module is an electronic circuit comprising *inter alia* a plurality of $q+1$ RF signal inlets, a plurality of $q+1$ RF signal outlets and a plurality of $(p+1)q$ diodes, q being any even integer ~~number~~, in such a manner that each of said pq diodes interconnects one of the q inlets with p outlets; p being an integer ~~number~~ such that $1 \leq p \leq q$ and further wherein a single central beam is not mirrored.

33. (currently amended) The antenna assembly as defined in claim [[1]] 9, said assembly comprising:

a plate comprising the element array;

a predetermined axis of said plate;

p RF input/outputs;

q inlets;

a plurality of $p + q$ diodes;

interconnection of each of said q inlets with j outlets by means of each of said $p + q$ diodes;

at least one RF switch;

a plurality of 1:L splitter modules;

an array of *n* by *m* elements with any polarization desired by the user; and,

a plurality of *s* switching modules adapted for mirroring said plurality of L main beam lobes;

wherein *s*, L, D denote the signal, beam and diodes, and further wherein *n, m, i* and *j* are any positive integer numbers, and so that *i*s=2*i*B=4*i*D, and further wherein the symmetry of the mirrored beams is referred to a predetermined axis of said plate, and further wherein said antenna assembly is adapted for mirroring a plurality of L main beam lobes.

34. (canceled)